

FM 11-14

DEPARTMENT OF THE ARMY FIELD MANUAL

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ARMY SIGNAL SUPPLY AND MAINTENANCE BATTALION

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HEADQUARTERS, DEPARTMENT OF THE ARMY

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ARMY SIGNAL SUPPLY AND MAINTENANCE BATTALION

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CHAPTER I

INTRODUCTION

1. Purpose

This manual is a guide for the battalion commander and his staff, the company officers, and key personnel of an army signal supply and maintenance battalion, as organized and equipped under TOE's 11-155(), 11-156(), 11-157(), and 11-158().

2. Scope

The manual covers the mission, organization, operation and tactical employment, and administration of an army signal supply and maintenance battalion in a theater of operations. It also includes information on equipment, training, records and reports, security, and related matters. It presents information which is applicable to both nuclear and nonnuclear warfare.

3. References

Publications pertaining to this manual are listed in appendix.

4. Mission

The mission of an army signal supply and maintenance battalion is to:

- a. Operate the field army signal depots and signal supply and maintenance points.
- b. Provide semifixed fourth echelon maintenance for signal equipment within a field army.
- c. Provide mobile third and fourth echelon maintenance for signal equipment within a field army.

5. Capabilities

At full strength, the battalion is capable of providing the following facilities within a field army consisting of three corps of twelve divisions.

- a. Operation of two depots for all classes of signal supply.
- b. Operation of three signal supply and maintenance points.
- c. Semifixed fourth echelon maintenance for all types of signal equipment within a field army.
- d. Mobile third and limited fourth echelon maintenance for all types of signal equipment within a field army.

6. Strength and Mobility

a. The authorized strength of an army signal supply and maintenance battalion is given in TOE 11-155().

b. The mobility of each company of the battalion will vary according to the mission of the company.

(1) Headquarters and headquarters detachment is 60 percent mobile.

(2) The signal forward supply and maintenance companies are 90 percent mobile.

(3) The signal depot companies are 40 percent mobile.

7. Assignment

The army signal supply and maintenance battalion is assigned to an army signal group.

8. Control

Control of the army signal supply and maintenance battalion is shown in figure 1. The command structure from the army signal section through the army signal group to the battalion is shown in heavy black lines.

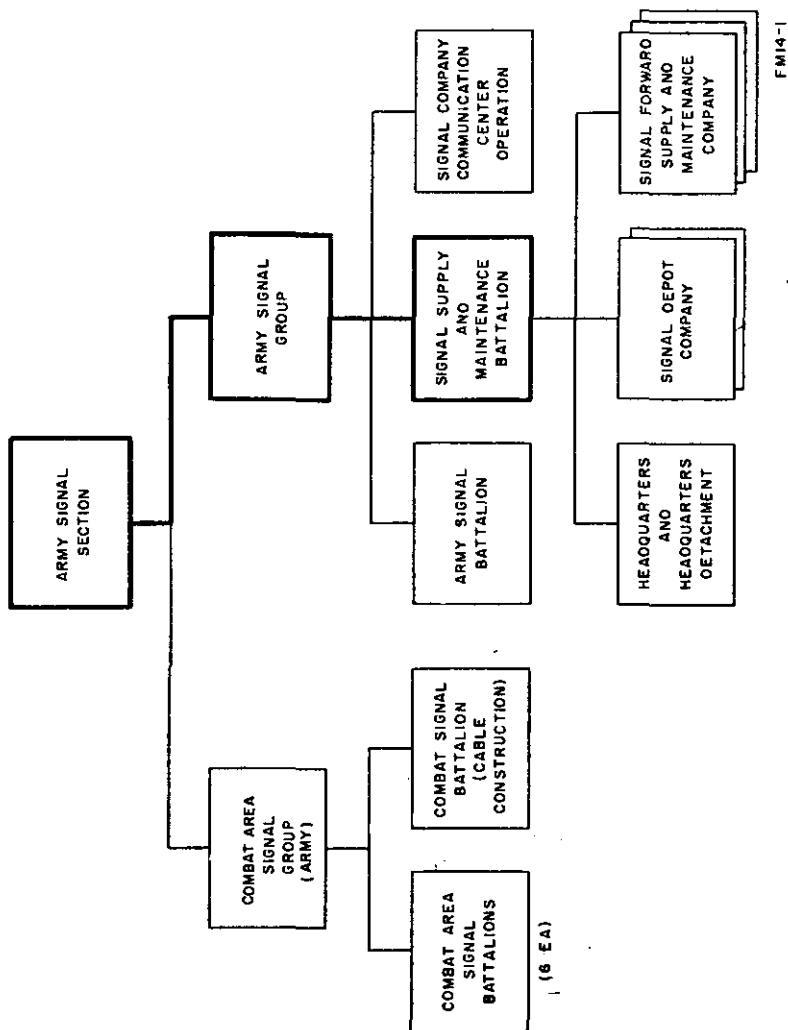


Figure 1. Signal organization at field army level.

CHAPTER 2

SIGNAL SUPPLY AND MAINTENANCE BATTALION ORGANIZATION AND EMPLOYMENT

Section I. BATTALION ORGANIZATION AND EMPLOYMENT

9. Battalion Components

a. The army signal supply and maintenance battalion (fig. 1) consists of:

- (1) A headquarters and headquarters detachment (TOE 11-156()).
- (2) Three signal forward supply and maintenance companies (TOE 11-157()).
- (3) Two signal depot companies (TOE 11-158()).

b. The battalion is organized in such a way that the number of companies can be varied to operate under different tactical conditions as follows:

- (1) When the battalion supports a field army of three corps, each consisting of three or four divisions, two depot companies and three forward supply and maintenance companies are authorized.
- (2) When the battalion supports a field army of two corps, each consisting of three or four divisions, one depot company and two forward supply and maintenance companies are authorized.
- (3) When the battalion is supporting a separate corps, the central stock control section operates at reduced strength. One signal depot company and one forward supply and maintenance company are authorized.

10. Employment

a. General. The army signal supply and maintenance battalion operates two signal depots and three signal supply and maintenance points in the field army area (fig. 2).

- (1) The signal depot and the signal supply and maintenance points are located so as to provide fast and efficient signal supply and maintenance support for units of the field army. Supply functions and maintenance functions are combined at the signal depots and at the signal supply

and maintenance points. At each location, one commander has responsibility for both functions.

- (2) Supported units submit unconsolidated requisitions direct to the appropriate signal depot or signal supply and maintenance point. So far as possible, requisitions are filled from the onhand stocks of the most forward signal supply element receiving the requisitions. Requisitions which cannot be completely filled by the first recipient are passed back along the field army chain of supply until the filling action is completed. The signal supply element that fills the requisitions also packs and marks the items for the requesting organization and arranges for shipment and pickup of the packaged items. Requisitions for items out of stock or for items not stocked by the army signal depots are sent to the theater administrative zone (TAZ) for filling. Items provided by the TAZ are packaged and marked for shipment to the requesting units. When providing signal supply and maintenance support, the direct exchange method is used to the maximum. This is a procedure by which unserviceable items are exchanged for serviceable items.

b. Signal Depot Companies. The two signal depot companies of the battalion are employed as intermediate signal supply agencies between the TAZ and elements of the field army.

- (1) The signal depots operated by the signal depot companies provide routine signal supply and maintenance support for all troops within their respective areas of responsibility. They stock only selected, fast-moving items, as determined by demand and experience. The depots are strategically located within the army maintenance area to:
 - (a) Provide adequate dispersion of all signal stocks of the field army.
 - (b) Support local units.
 - (c) Provide backup support for the signal supply and maintenance points.
- (2) The repair platoon of each signal depot company should use production-line repair methods; however, production-line repair methods will be limited because repair functions are performed in shop trucks.
- (3) Repair schedules are prepared by the battalion plans and control section.

c. Signal Forward Supply and Maintenance Companies. The three companies of the battalion normally provide signal supply and maintenance support for the forward elements of a field army.



Section II. BATTALION COMMUNICATIONS

11. General

The control of battalion operations is facilitated through a battalion telephone and teletypewriter communication network (fig. 3). The battalion provides its own internal communications. The army area communication system provides trunking facilities.

12. Battalion Communication System

a. Telephone Communications. A small telephone switchboard is provided within the battalion headquarters section of headquarters and headquarters detachment (fig. 3) for local telephone service, service to the depot company located nearby, and for connections to the army area communication system for service to the other companies of the battalion and other units or installations connected to the army area communication system.

b. Teletypewriter Communications. A small teletypewriter switchboard is provided the central stock control section of headquarters and headquarters detachment (fig. 3) to make connections to the teletypewriters at the signal depot companies and the signal forward supply and maintenance companies of the battalion. The switchboard may also be used to connect the stock control section with other organizations and installations, such as logistical coordinating centers and TAZ depots, and for teletypewriter exchange service. Teletypewriter sets are provided in the central stock control section and the companies of the battalion for the reception of printed page copy and perforated tape copy. Teletypewriter sets provide both keyboard and tape transmission of copy. Sets of standard perforated and printed tapes can be prepared locally for often-used line items, standard requisitions, and similar operations.

c. Communications to Mobile Maintenance Teams. Communications to a mobile maintenance team operating away from its parent unit is provided by the army area communication system. Normally, the mobile maintenance team is connected to the army area communication system through the unit with which it is working; however, when working alone, it may be connected directly to the nearest signal center.

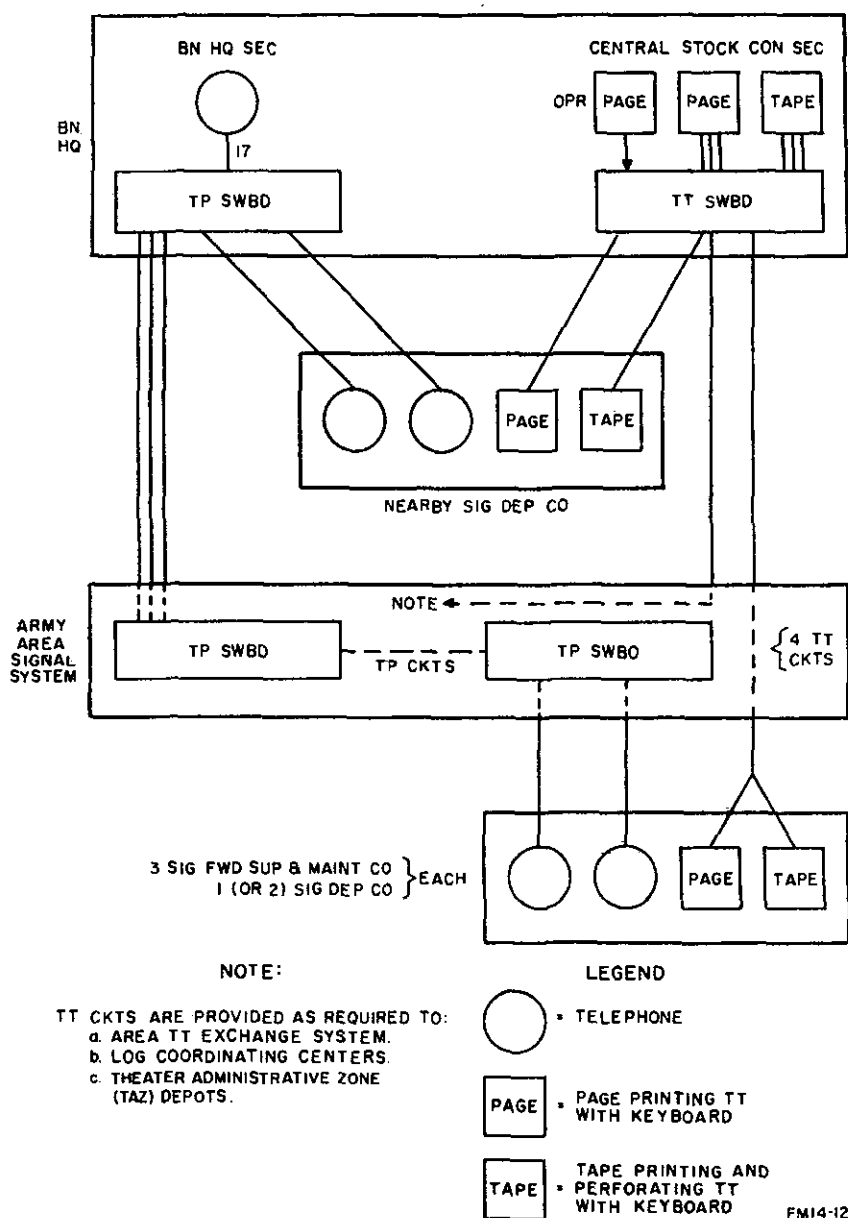


Figure 3. Type battalion telephone and teletypewriter communication system.

CHAPTER 3

HEADQUARTERS AND HEADQUARTERS DETACHMENT

13. General

Headquarters and headquarters detachment (fig. 4) directs and coordinates the operations and training of the signal battalion, and provides the facilities with which the battalion commander controls the battalion.

14. Battalion Headquarters

Battalion headquarters, which is composed of the battalion commander and his staff, controls and supervises the operations of the companies assigned to the army signal supply and maintenance battalion.

15. Headquarters Detachment

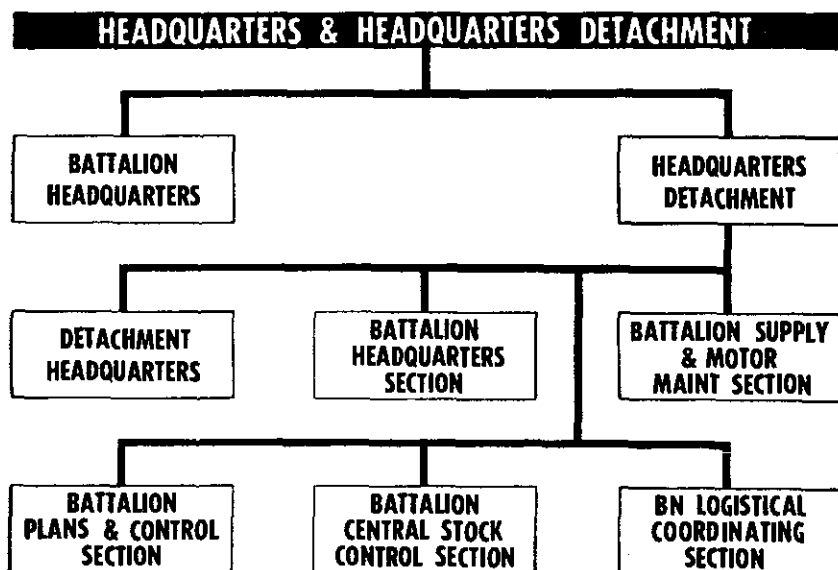
Headquarters detachment (fig. 4) provides the personnel and administrative equipment required by the appropriate battalion staff officers in order that they may supervise and coordinate the administrative and logistical functions of the battalion.

a. Detachment headquarters provide the personnel and equipment to augment the mess, motor maintenance, and personnel administration activities of the signal depot company to which the battalion headquarters and headquarters detachment is attached for logistical support only.

b. The battalion headquarters section provides the personnel and administrative equipment required by the adjutant/S1 in planning, conducting, supervising, and coordinating the administrative and personnel functions of the battalion.

c. The battalion supply and motor maintenance section provides the personnel and equipment required by the battalion S4 and battalion motor officer in planning, conducting, supervising, and coordinating the unit supply and motor and power generator maintenance functions of the battalion.

d. The battalion plans and control section provides the personnel and equipment required by the battalion S3 to plan, train, inspect, coordinate, and control the operations of the battalion. This section prepares maintenance schedules based on the information



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Figure 4. Organization of headquarters and headquarters detachment.

received from the stock control section as to the unserviceable items on hand, availability of repair parts, and items in short supply. The section also:

- (1) Prepares a standard operating procedure (SOP) and training schedules for the battalion.
- (2) Makes frequent inspections of the operations and training of the companies of the battalion.
- (3) Recommends the siting or location of the signal depots and signal supply and maintenance points.
- (4) Assigns areas of responsibilities to the companies.
- (5) Assists army and corps signal officers in communication equipment planning.

e. The *central stock control section* performs the basic signal stock control functions of the field army to which the battalion is assigned. The section:

- (1) Keeps accountable records.
- (2) Maintains records to indicate the availability of stock.
- (3) Determines requisitioning objectives.
- (4) Prepares shipping documents.
- (5) Edits requisitions.
- (6) Accumulates and provides stock management data.
- (7) Provides guidance for the priority scheduling of maintenance (repair) efforts.
- (8) Analyzes nonroutine requisitions and determines the action to be taken.

- (9) Makes recommendations to the army signal officer on items to be placed on the selective stockage lists, and determines the quantities and types of signal supplies to be stocked in the army signal depots and signal supply and maintenance points.

f. The *logistical coordinating section* provides specialists who maintain liaison with supported units. When required, the section may constitute the signal portion of an army logistical coordinating section.

CHAPTER 4

SIGNAL FORWARD SUPPLY AND MAINTENANCE COMPANY

Section I. GENERAL

16. Mission

The signal forward supply and maintenance company has the following mission:

- a. To operate one or more field army signal supply and maintenance points.
- b. To provide mobile signal maintenance support in the forward area of the field army.
- c. To provide security protection for its installations.

17. Location

A signal forward supply and maintenance company normally is located in the corps area (fig. 2) to provide close signal supply and maintenance support for the corps and its divisions. The field army signal supply officer, in coordination with the battalion S3, recommends the area for location of the signal supply and maintenance points to be operated by the companies. In selecting the sites, certain factors, such as the availability of transportation facilities, routes of communication, tactical situations, open- and covered-storage space, and the physical location of units to be supported must be considered.

Section II. COMPANY ORGANIZATION

18. General

The signal forward supply and maintenance company (fig. 5) consists of a company headquarters, a signal supply platoon, a radio equipment maintenance platoon, a wire equipment maintenance platoon, and a special equipment maintenance platoon.

19. Company Headquarters

Company headquarters provides administrative and command supervision and mess and motor maintenance facilities for the company. It is responsible for the physical security of company installations.

20. Signal Supply Platoon

The signal supply platoon (fig. 6) handles all types of signal supply items. It operates the supply portion of a signal supply and maintenance point.

21. Equipment Maintenance Platoons

The equipment maintenance platoons provide mobile third and limited fourth echelon maintenance of all signal equipment within the company's area of responsibility.

a. *Radio Equipment Maintenance Platoon.* This platoon (fig. 7) contains maintenance teams that repair all HF, VHF, and UHF transmitting, receiving, and auxiliary equipment used for AM, FM, and radio relay communications.

b. *Wire Equipment Maintenance Platoon.* This platoon (fig. 8) contains maintenance teams that repair the carrier and switching equipment used with radio relay and spiral-four cable. The platoon also contains teams that service teletypewriter and cryptographic equipment.

c. *Special Equipment Maintenance Platoon.* This platoon (fig. 9) contains maintenance teams that repair radar, meteorological, facsimile, and other special electronic equipment, such as that used for surveillance, electronic warfare, television, and air navigation purposes. Other teams in the platoon repair photographic and power-generating equipment.

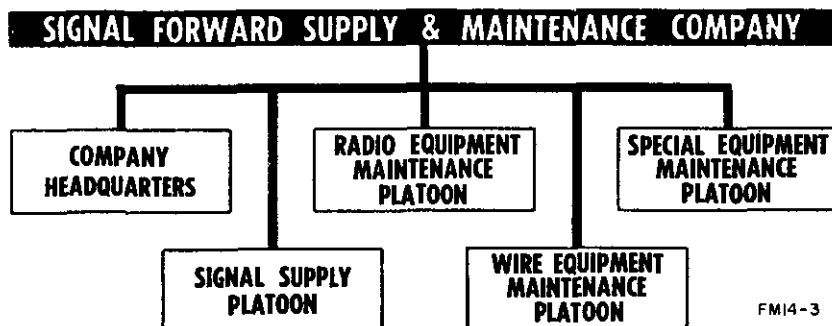


Figure 5. Organization of signal forward supply and maintenance company.

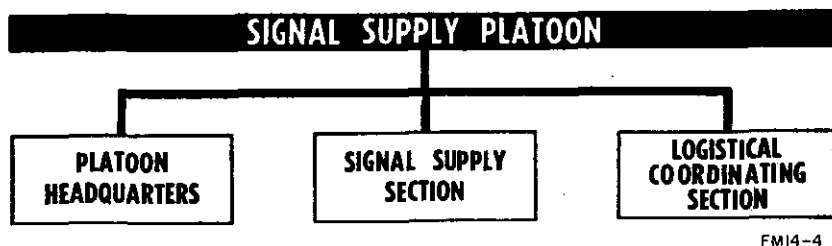
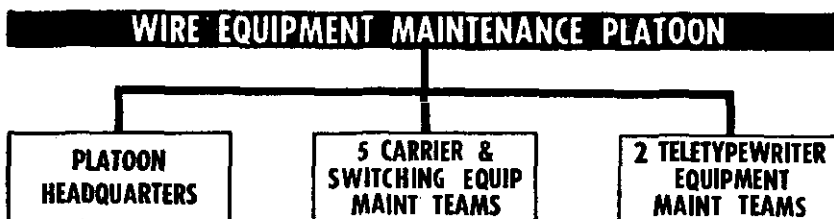


Figure 6. Organization of signal supply platoon.



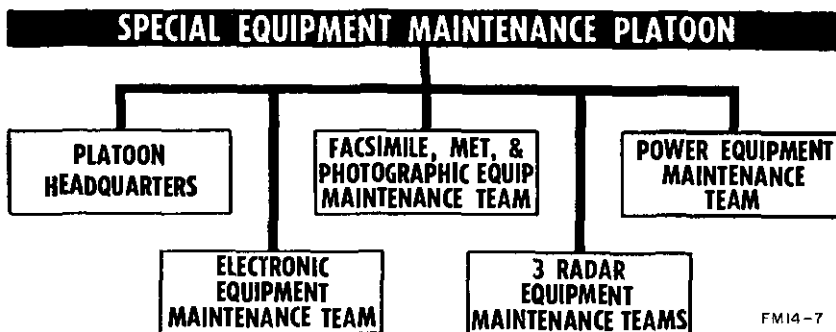
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Figure 7. Organization of radio equipment maintenance platoon.



FM14-6

Figure 8. Organization of wire equipment maintenance platoon.



FM14-7

Figure 9. Organization of special equipment maintenance platoon.

Section III. SUPPLY OPERATIONS

22. Stocks of Supplies

The signal supply platoon stocks selected, fast-moving signal items for issue to requesting units and for the various maintenance teams operating at the supply and maintenance points, as well as for mobile teams supporting units in the field. Included in this stock are bulk items, such as dry batteries, field wire, and cable; direct exchange items, such as receivers, amplifier stages, and handsets; and limited quantities of essential piece parts, such as commonly used resistors, capacitors, and transformers.

23. Processing Requisitions

The signal supply platoon receives requisitions from the units being supported, fills these requisitions to the extent of stock on hand, and forwards unfilled requisitions, without consolidation, to the battalion central stock control section for further action. During the process of filling the requisitions, the platoon packs and marks items destined for the requisitioning organization. This procedure eliminates the need for breaking down shipments, placing items in stock, and taking items out of stock at various points along the chain of supply.

24. Records

The signal supply platoon maintains only the minimum records required for its day-to-day operations. Complete and detailed records are maintained by the central stock control section of headquarters and headquarters detachment.

25. Equipment Exchange

The signal supply platoon receives unserviceable signal items from the equipment maintenance teams and other sources in the area and replaces them with serviceable items. Unserviceable items that cannot readily be repaired by the maintenance teams at the signal supply and maintenance point are evacuated to a signal depot for repair or further evacuation, as required. The platoon also conducts signal equipment salvage operations and processes captured enemy equipment, as directed by battalion headquarters.

26. Logistical Coordinating Section

The logistical coordinating section of the signal supply platoon maintains liaison with supported units. When required, the section may constitute the signal portion of a logistical coordinating center that supports a corps.

Section IV. MAINTENANCE OPERATIONS

27. General

a. The maintenance operations of the signal forward supply and maintenance company are performed by signal equipment maintenance teams. The maintenance teams are organized functionally into three platoons, each of which has a headquarters for the general supervision of its teams' activities. Each team contains repair specialists, who are capable of operating semi-independently at sites remotely located from company headquarters. The teams are 100 percent mobile, and are dispatched by the company com-

mander to any area or unit for the performance of third or limited fourth echelon signal maintenance.

b. The teams make on-the-spot inspections of equipment brought in for maintenance work to determine whether the equipment should be repaired immediately or exchanged for serviceable items. Maximum use should be made of the direct exchange method, which provides fast service for the supported units. For some of the bulkier types of equipment, such as large radar sets, appropriate maintenance teams may make the necessary repairs on site. Teams not employed on a maintenance mission usually are grouped near the supply and maintenance point to operate as the signal maintenance facility of that point.

c. Each team maintains only a small working stock of frequently used replacement items and repair parts. It draws replacement items, needed for exchange purposes, from the supply platoon of the signal forward supply and maintenance company. These teams maintain a minimum of records.

28. Employment of Maintenance Teams

a. Repairs made promptly in the vicinity of the using organization make it possible to restore equipment to service without bringing it to the army signal depots. This procedure decreases the quantity of equipment processed through the signal supply system. The maintenance teams of the signal forward supply and maintenance company perform this service by providing on-the-spot signal equipment repair for army, corps, and divisional units.

b. The overall employment of the maintenance teams of the signal forward supply and maintenance company depends on the tactical situation. The use of these teams should be planned to provide the maximum maintenance support in all tactical situations. This is usually accomplished by forming a pool of maintenance teams at the signal supply and maintenance point, and dispatching a maintenance team in a Signal Corps shop truck to make on-the-spot repairs. In certain situations, it may be advisable to attach a maintenance team to the supported unit. For example, a radio repair team can be attached to the division signal battalion when the unserviceable radio equipment in the division is beyond the repair capability of the division signal battalion. Under other conditions, a carrier and switching equipment maintenance team may be attached to the signal unit operating an army area signal center in the corps area to repair carrier and switching equipment. When attachment is advisable, the attached maintenance team will

receive mess and ordnance support from the supported unit, but the operation and administrative control of the attached team will remain with the parent signal forward supply and maintenance company.

c. When the maintenance teams of the signal forward supply and maintenance company are not employed in their normal mission, they can be used to perform the following functions:

- (1) *Maintenance training.* The mobile maintenance teams assist the supported units by training their maintenance personnel. In addition, supported units may request assistance in carrying out their training program. In this case, a team may be dispatched to the unit for this purpose.
- (2) *Inspections.* When not actually engaged in supporting a combat situation, the mobile maintenance teams may be used to assist the commander in conducting command, spot check, and technical inspections. Instruction in proper maintenance technique is given concurrently to the unit being inspected.
- (3) *Modification work on signal equipment.* Mobile maintenance teams modify Signal Corps equipment in accordance with modification work orders. This work is usually performed after combat or during lulls in combat. Division signal officers may request a number of teams to cover the divisions at one time and perform repair and/or modification on a concentrated effort basis.

d. The mobile teams are nearly self-sufficient, in that they carry bedding, rations, etc., in a $\frac{3}{4}$ -ton truck. When the situation permits, these teams will mess with the unit they are supporting and will utilize whatever living accommodations that are available.

e. The mobile maintenance teams must coordinate their activities with the units they support. In combat, when moves are contemplated, plans for the movement of the teams must be made as far in advance as possible. Lack of coordination with supported units may leave the teams isolated and in a dangerous situation.

CHAPTER 5

SIGNAL DEPOT COMPANY

Section I. GENERAL

29. Depot Mission and Capabilities

a. Mission. To operate one field army signal depot.

b. Capabilities.

- (1) At full strength this unit provides the following facilities within a field army consisting of three corps of twelve divisions:
 - (a) Operation of one depot which provides half of the signal depot support for the field army, including proportionate distribution of all signal supplies to the signal supply and maintenance points.
 - (b) A proportionate share of the third and fourth echelon maintenance, including limited on-site mobile maintenance, for all types of signal equipment within a field army.
- (2) At reduced strength, the company has the lesser capabilities required during prolonged noncombat periods and during limited combat periods.
- (3) The company has no TOE provision for organization as a type B unit.
- (4) This unit is self-sufficient in that it provides for its own administration, mess, and motor maintenance. When required, this unit is capable of operating as a separate company for limited periods of time.
- (5) Individuals of this unit can fight as infantrymen when required. The unit can defend itself and its installations against hostile ground attack.

30. Depot Location

a. Nuclear warfare dictates that in general, logistical facilities be located more frequently than in the past in relatively undeveloped areas or in areas of low population density. An area is used only after an assessment of its potential as an enemy target has been considered. The overall effects of attacks by nuclear weapons can be reduced through:

- (1) The provision of multiple, small installations.
- (2) The establishment of alternate key facilities.

- (3) The proper arrangement of material being stored.
- (4) The use of camouflage and dummy positions.
- (5) Target analysis of the installation on location plan.
- (6) The attainment of maximum dispersion consistent with control and risk.
- (7) The utilization of protection to include terrain features, barricades, revetments, and underground shelters.
- (8) Providing adequate area damage control planning and operations.

b. Once the general location for a signal depot has been established in accordance with these major considerations, a number of other considerations influence the selection of a specific location and the operating capabilities of the depot. The signal depot company commanders receive instructions from the battalion S3 on the appropriate location of the depots, with reference to the deployment of the units and signal supply and maintenance points that the depots must support. The signal depots provide adequate dispersion of the army's total signal stocks, support local units within the depots area of responsibility, and provide backup support for signal supply and maintenance points.

c. From the standpoint of efficiency of depot operations the depot should displace as infrequently as possible. Movements of less than 50 miles ordinarily are not economical. Tonnage at an army depot should be kept low; it may vary from 6,000 to 10,000 tons on hand. Materials handling equipment often is not available in desired quantities; therefore, less frequent movement of the depot will permit a better organized installation and result in better service to the troops. However, other factors may present overriding considerations. Vulnerability to nuclear and CBR attacks may dictate frequent moves.

31. Depot Location Considering Efficiency of Operation

a. *Transportation.* Prospective depot sites should be examined first from the viewpoint of transportation.

- (1) Proximity of ports, rivers, canals, highways, airfields, and railroads must be considered. If possible, the army signal depot should be located close to rail transportation facilities. Rail sidings, if available, will permit the working of railroad cars from loading platforms, and the movement of supplies directly between cars and the storage space.
- (2) The depots should be located to provide easy access by trucks. To minimize the manpower requirements for handling large incoming and outgoing shipments by truck, every reasonable effort should be made to provide

facilities for loading and unloading trucks directly at the storage warehouse.

- (3) The depot site should have hardstand open and covered storage to facilitate the use of materials handling equipment. This equipment is needed to save time and labor in moving supplies. Materials handling equipment, such as conveyer sections, cranes, forklifts, and warehouse tractors and trailers (fig. 10) is authorized by the TOE.

b. Utilities. The availability of utilities is another important factor in the location of an army signal depot.

- (1) A depot should be located near a good water supply, which is necessary for drinking purposes, for use in batteries, and for washing vehicles.
- (2) Where possible, the depot should be located near a source of electrical power, which is necessary for lighting, for charging batteries, and for operating power tools and test equipment. Although small gasoline and diesel engine-driven generators are provided by TOE for this purpose, their use should be avoided whenever possible.

c. Manpower. It is advantageous to locate an army signal depot where manpower can be readily obtained.

- (1) An army signal depot may be operated by military personnel, by a combination of military and civilian personnel, by allied military personnel, or by prisoners of war. TOE 11-158() authorizes sufficient military personnel to conduct and supervise depot operations. The number of local civilian personnel employed will be determined by the army commander, depending on the number of shifts to be used and other local conditions. It is generally desirable to use civilian personnel from a labor pool to perform such tasks as loading, unloading, sorting, and moving supplies.
- (2) A signal depot company, when augmented by 200 to 300 competent civilians, can operate a signal depot containing 15,000 to 20,000 tons of stock and handles as many as 20,000 to 30,000 items.
- (3) When an army signal depot is located in or near a town, additional security precautions must be taken. Refer to paragraph 33 for further information on depot security.

32. Depot Space and Storage Requirements

a. One of the first problems of any depot commander is the protection of supplies against the weather. It is estimated that approximately 75 to 90 percent (by tonnage) of signal supplies require covered space. In a combat zone, there is seldom enough

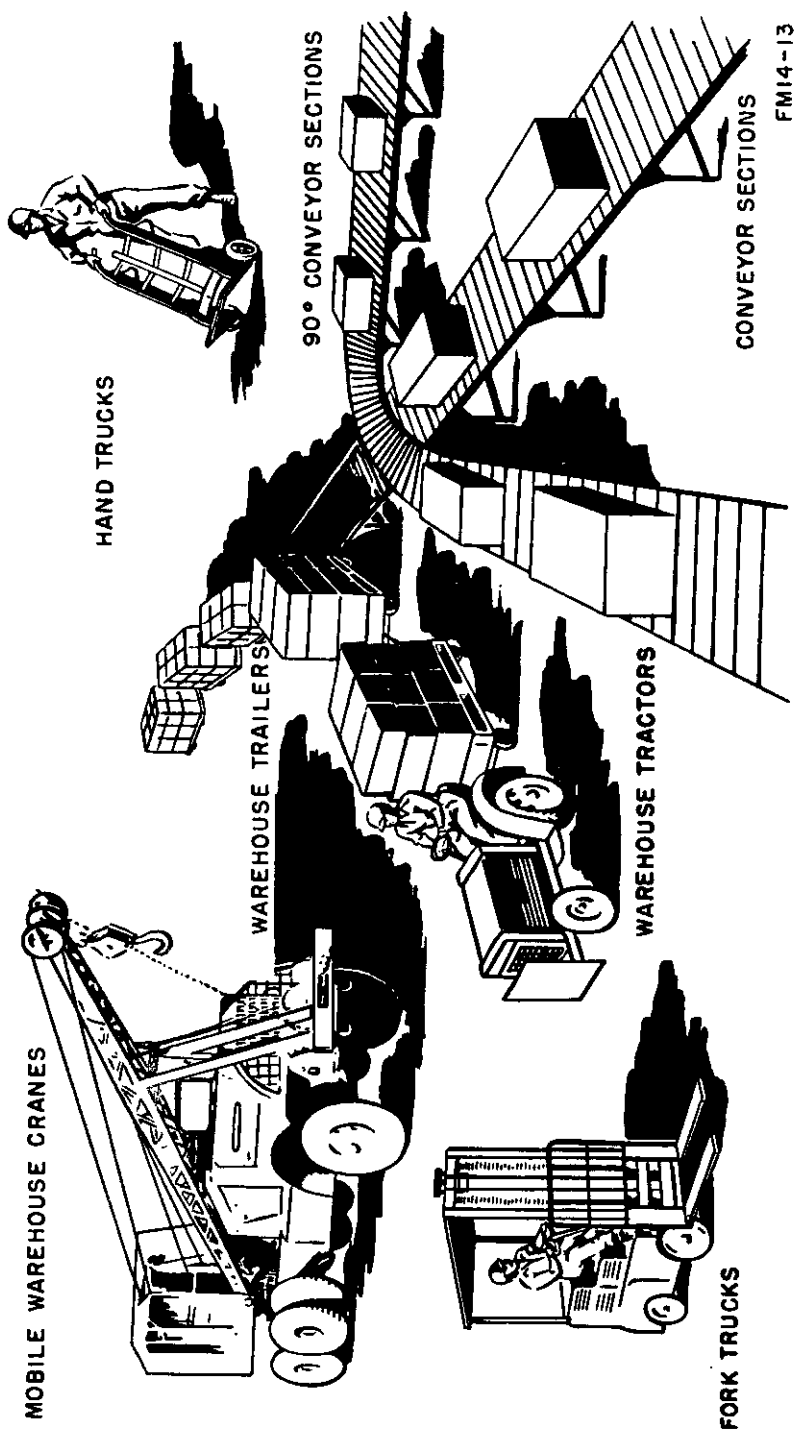


Figure 10. Basic materials handling equipment.

covered storage space available, but the depot commander should make every effort to provide shelter against the elements. Permanent or semipermanent underground and surface facilities, such as factories or warehouses, provide excellent locations for storage facilities. Where such facilities are not available, the depot commander should undertake to obtain the construction of temporary buildings. Tentage can be used to protect electrical communication equipment from the elements when other means are not available. Caves also may provide suitable storage areas.

b. Additional covered storage space is needed for repair and maintenance shops, offices, billets, and mess halls for depot personnel. In estimating covered storage space requirements, these essential activities must not be overlooked.

c. Many items of signal supply, such as insulators, pole-line hardware, lead-covered cable, bare copper wire, and special purpose vehicles, can be stored in the open without serious damage or excessive deterioration. Wherever possible, well-drained areas with hardstand should be used for all open storage. Such areas provide the best storage space and permit use of available materials handling equipment and other labor-saving devices.

d. When choosing sites for storage areas, it is essential to consider the worst condition of the areas and the roads leading to them during inclement weather.

33. Depot Security

a. Security is an important consideration in the operation of an army depot. Pilferage and theft must be guarded against by erecting fences or barriers and by establishing a system of guards and police. These precautions will not altogether prevent loss through theft and pilferage, but they will reduce it.

b. The depot must have suitable firefighting equipment installed at appropriate locations, and all depot personnel must be trained in the employment of firefighting equipment.

c. Where the enemy is active, precautions must be taken to protect the depot from air and guerilla attacks. Primary defense against air attack is provided by army air defense units. The depot commander can help by adhering to standard camouflage practices and by dispersing depot activities. In addition, precautions must be taken to protect personnel and material of the depot from the hazards of radiological fallout and contamination.

d. Sometimes, in combat areas, a depot may have to be abandoned. To provide for such an emergency, it is necessary to have a complete destruction plan ready for immediate use. Provision

must be made to destroy or render useless all equipment that might fall into enemy hands. All classified equipment must be destroyed if there is danger of its capture by the enemy.

Section II. COMPANY ORGANIZATION

34. Organization of Signal Depot Company

The signal depot company (fig. 11) consists of a company headquarters, a supply platoon, a repair platoon, and a cryptographic equipment section.

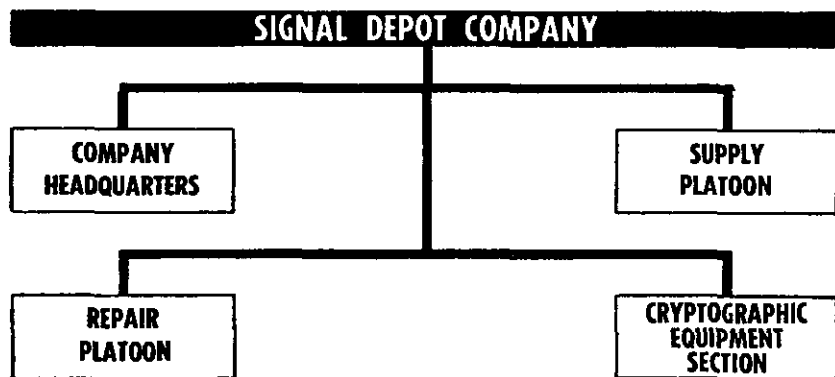
35. Company Headquarters

Company headquarters provides administrative, supply, mess, and motor maintenance facilities for the company, and billeting facilities for assigned and attached personnel. It is responsible for the physical security of the company.

36. Supply Platoon

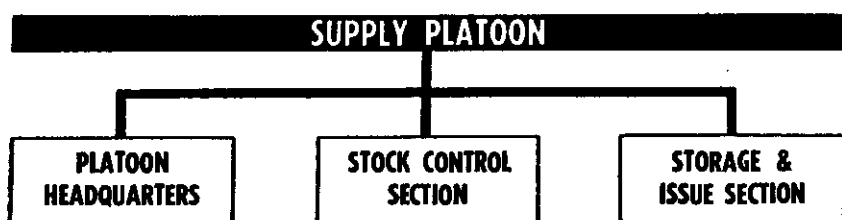
a. The supply platoon (fig. 12) stocks selected fast-moving signal supplies, such as bulk items and direct exchange and repair parts. It also stocks training films, which are handled on a bulk distribution basis. The platoon, however, does not operate a film and equipment exchange.

b. The platoon conducts signal equipment salvage operations and processes captured enemy signal equipment. When possible, requisitions received locally are filled from depot stocks. The supply platoon packs and marks items destined for, or to be picked up by, the requesting organization. This eliminates the need for breaking down shipments at intervening points in the supply chain. As directed by the battalion central stock control section, the platoon (using depot transportation) restocks the supply and maintenance points for which it is responsible.



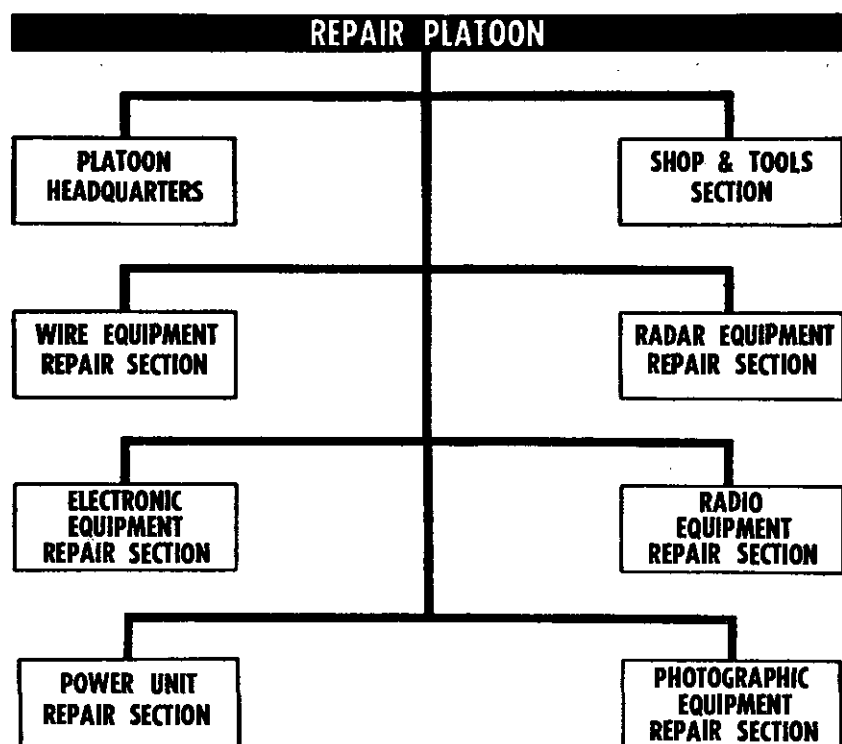
FM14-8

Figure 11. Organization of signal depot company.



FM14-9

Figure 12. Organization of supply platoon.



FM14-10

Figure 13. Organization of repair platoon.

c. Defective or inoperable items received by the platoon from any source are classified, recorded, and stored for subsequent disposition, as directed by the battalion plans and control section. The supply platoon is required to keep only the minimum records needed for day to day operation. (Complete and detailed records are maintained by the battalion central stock control section.)

37. Repair Platoon

a. The repair platoon (fig. 13) provides semifixed fourth echelon maintenance and limited on site mobile third and fourth echelon

maintenance for all types of signal equipment in the field army. Each repair section in the platoon services the type of equipment described by its title designation (for example, radio repair section, radar repair section, etc). The electronic equipment repair section services meteorological, facsimile, air navigation, surveillance, television, and electronic warfare equipment.

b. In addition to its day by day repair activities for supported units, the repair platoon conducts production line *repair runs* for quantities of specific kinds or types of unserviceable equipment accumulated by the supply platoon. The special runs are directed by the battalion plans and control section, and are predicated on the urgency of need for certain types of equipment and on the availability of repair parts required for a special production run. Except for the repair parts obtained for production runs, the platoon maintains on hand only a small working stock of replacement items and repair parts.

c. The repair platoon also organizes and dispatches, on a limited basis, mobile repair teams required for the provision of additional maintenance assistance to units within the area of responsibility of the depot.

38. Cryptographic Equipment Section

The cryptographic equipment section receives, stores, and issues registered and nonregistered cryptographic material, equipment, and spare parts. The section also accounts for cryptographic material, and performs third and fourth echelon maintenance on cryptographic equipment. In addition to its normal semifixed repair operations, the cryptographic section provides mobile teams that perform third and fourth echelon repair of cryptographic equipment away from the depot. For security reasons, the section normally is located near company headquarters, and is maintained as a separate combined cryptographic supply and repair organization apart from the supply and repair platoons of the company.

Section III. SUPPLY OPERATIONS

39. Stock Control

a. The nerve center of all depot operations is the stock control section, which processes all requisitions and keeps records on all depot transactions. Requisitions received from supported units in the immediate vicinity of the depot must be edited to determine that the items requisitioned are authorized, that the requisitions contain all essential information, and that items requisitioned are properly identified.

b. Accurate and up-to-date records of all depot stocks, including receipts, issues, and adjustments, must be maintained. At army level, a stock record card is used to show the balance of stock on hand. The card also lists the stock number, unit of measure, item nomenclature, issues, inventories, control level, and quantities due in and due out. A separate stock record card is maintained on each item stocked in the depot.

c. An elaborate record system is not feasible at the army signal depot, since sufficient clerical personnel are not available. However, certain records should be maintained. These records should show:

- (1) Daily stock status of critical and regulated items in the depot.
- (2) Items due in and on requisition from the supporting TAZ section.
- (3) Receipt of due-in items.
- (4) Items in critical supply within the field army.

d. Normally the level of supply for the army signal depot will be set by the theater commander. A continuous estimate of the logistical situation in conjunction with an estimate of the tactical situation will indicate the level of supplies to be stocked. Normally, the army signal depot will maintain a 15-day level of supply. Each supply and maintenance point will maintain a 2- to 3-day level. Supplies at the supply and maintenance points are maintained at this relatively low level, to meet rapidly moving situations and to prevent capture of supplies.

40. Control of Items in Short Supply

When the field army signal supply officer determines that shortages of certain signal items are developing, he analyzes the situation, and forwards all pertinent information to the army signal officer. The army signal officer coordinates the matter with the army general staff, and initiates action to place controls into effect. If shortages exist throughout the theater, controls are placed into effect at theater level. Items in short supply must be distributed to those units having the highest tactical priority, as determined by the appropriate commander.

Section IV. MAINTENANCE OPERATIONS

41. Depot Signal Maintenance

a. The signal depot company has the capability of performing third and fourth echelon maintenance of signal equipment. The repair platoon of the depot company operates from Signal Corps repair-shop trucks and shop van trucks. The platoon maintains

a level of spare parts that are replenished from depot stock as required.

b. When items are received for repair, a replacement is normally made on a direct exchange basis. The damaged equipment is returned to depot stock when repaired.

c. The amount of maintenance that can be accomplished depends, to a large extent, upon the intelligence, experience, industry, and initiative of maintenance personnel. Whenever possible, production lines should be set up for repair work. Production-line methods improve the efficiency of repair shops and permit the use of unskilled workers, who may produce good work after short training periods.

42. Depot Salvage

Salvage operations for the depot are normally supervised by repair personnel. Salvage is recovered material that may be used for the original purpose for which it was intended, either with or without repair, and material that may be converted to a substitute use or sold for scrap. Prompt collection of equipment abandoned on the battlefield and utilization of waste material are important measures in conserving military resources.

CHAPTER 6

TYPE SUPPLY AND MAINTENANCE PROCEDURES (FIELD ARMY)

Section I. SUPPLY PROCEDURES

43. Army Supply and Maintenance Point

a. Requisitions (fig. 14).

- (1) The army supply and maintenance point (S-M point), operated by the signal forward supply and maintenance company, receives single line item requisitions from signal supply and maintenance sections and from corps troops. These requisitions need not be consolidated or submitted on a scheduled basis. DA Form 1546 may be used for requisitioning purposes.
- (2) The army S-M point will select, pack, and mark stock for shipment to the requisitioning organization. This procedure speeds up the flow of supplies by eliminating detailed breakdown at points of issue.
- (3) Items on the army S-M point stockage list will have a specific location, which will probably be in bins mounted in 2½-ton trucks and associated 1½-ton trailers. Stockage list items are replenished constantly by supporting army depots. Requisitions are filled from this stock. When a requisition cannot be filled and a complete or a partial dueout exists, a copy of DA Form 1546 will be sent to the army stock control center, where the dueout will be established. Shipment of requisitioned items will be effected as stock becomes available. Requisitions for items that do not appear on the army S-M point stockage list will be forwarded to the army stock control center.
- (4) Demand data copies of requisition DA Form 1546 (copy No. 7) received for stockage list items by army S-M point will be forwarded to the army stock control center.
- (5) The supply platoon at the S-M point will requisition and keep in stock maintenance float items that will be utilized in the repair effort in support of combat units.

b. Stock Control System.

- (1) The army S-M point will stock fast-moving items and maintain a stockage list and quantity of items they are authorized to stock.

- (2) As issues are made and recorded, a daily summary of issues will be forwarded to the army stock control center. This may be accomplished by available teletypewriter communications. The army stock control center then will direct a depot to replenish stocks of the army S-M point up to authorized quantities of the stockage list.
- (3) Items on the stockage list may be added or deleted, depending on the demands for the items received by the army S-M point.

44. Army Stock Control Center

a. Requisitions (fig. 14).

- (1) The army stock control center will receive requisitions from army S-M points and screen their master card files for availability of requested items.
- (2) The army stock control center then directs the appropriate depot to ship the requested items forward to the requesting organization.
- (3) All requests for critical and/or regulated items received at the army stock control center will be reviewed. Stocks will be released based upon the army policy and the need of the items by tactical units.

b. Stock Control System.

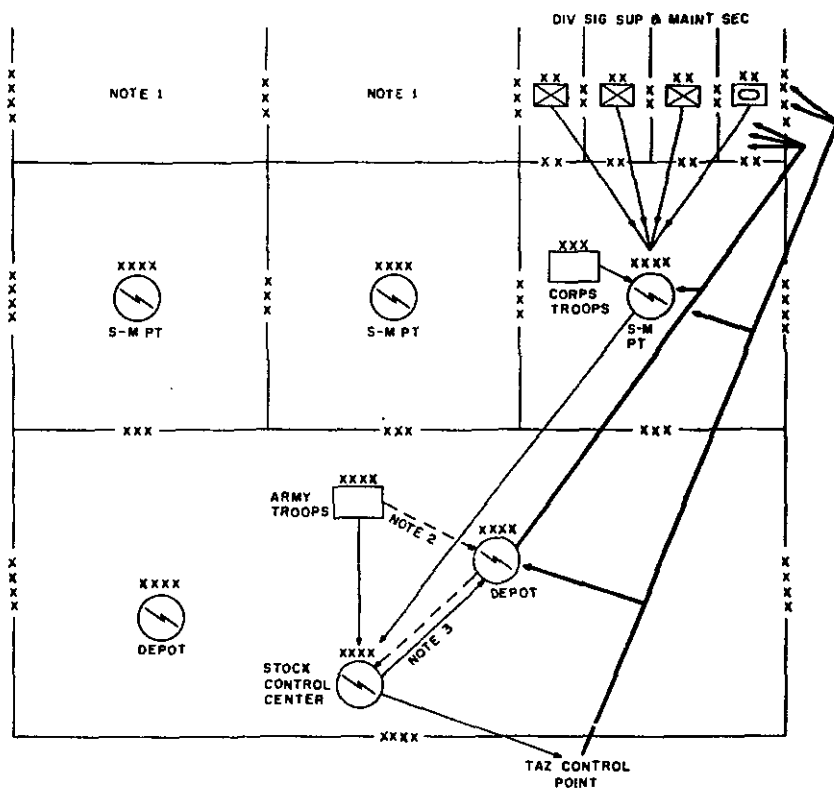
- (1) The army stock control center will maintain necessary stock control records for all army stocks. Through the use of available data processing equipment, these records will be current at all times.
- (2) When army stocks have reached the reorder point, the army stock control center will initiate requisitions to the designated TAZ control point for replenishment of these stocks. Appropriate shipping instructions will be forwarded to TAZ to direct shipment of stock to the army depots and/or army S-M points as required.
- (3) Upon receipt of demand data from army S-M points, the army stock control center may revise the supply point stockage lists, depending on the demand (or lack of demand) for the fast-moving items stocked by the S-M points.
- (4) A printed run-off listing all major items of signal equipment and a runoff listing of all critical items will be prepared based on the updated stock cards prepared by the army stock control center. Simultaneously, a duplicate set of cards will be run off for each report. These run-offs will be forwarded on a daily basis to the supply and maintenance division of the army signal section.

- (a) The reports present to the army staff the status of major equipment and critical items in the army depot systems.
- (b) In the event of loss or destruction of the army stock control center, essential duplicate card records exist for the reactivation of another center.

45. Army Depot

a. Requisitions (fig. 14).

- (1) The army depot receives shipping instructions (which in effect are mandatory requisitions) from the army stock control center in support of division, corps, and army units.



NOTES:

1. SAME AS FOR THE CORPS ON RIGHT.
2. ARMY DEPOT MAY ALSO SERVE AS SUPPLY POINT FOR ARMY TROOPS LOCATED IN VICINITY OF DEPOT.
3. SHIPPING INSTRUCTIONS FROM ARMY STOCK CONTROL CENTER TO ARMY DEPOTS ARE, IN EFFECT, MANDATORY REQUISITIONS UPON THE DEPOTS.

LEGEND:

- REQUISITIONS
- - - SHIPMENT OF SUPPLIES (WILL GO AS FAR FORWARD AS PRACTICAL)
- S-M PT SUPPLY AND MAINTENANCE POINT.

FM14-14

Figure 14. Flow of requisitions and shipment of supplies in a field army.

(2) The army depot receives requisitions directly from army troops when so directed.

(a) Upon direction of the army signal office, army troops which are located in the immediate vicinity of an army depot may requisition directly upon that depot. In this case, personnel of the stock control section, signal depot company, signal supply and maintenance battalion, will act in the capacity of an army supply point for local support of army troops.

(b) It would be advisable for control purposes that army troops located at a distance from the army depot submit their requisitions directly to the army stock control center.

(3) The army depot will select, pack, and mark stock for shipment to the requisitioning organizations. This procedure speeds up the flow of supplies by eliminating detailed breakdown at subsequent points of issue.

b. Stock Control System.

(1) Army depots maintain a locator system for their depot stocks. The depots may, however, operate without maintaining a stock record system. The stock record system for army depot stocks is maintained by the army stock control center.

(2) In instances where a depot supports local army troops, care must be taken that stocks intended for direct combat support are not depleted by issue to local army troops. This can be accomplished by marking or notating on the locator cards that portion of stocks allowable for local support. Beyond this point, no stock would be released for local support without submission to the army stock control center for shipping instructions.

(3) Since the stock records at the army stock control center reflect the balance of stock at the depot, the depot should not receive shipping instructions for stock which they do not physically have. If this occurs it will be handled as a warehouse refusal, and the army stock control center will be notified immediately. This is done in order to enable the army stock control center to fulfill its supply demands by directing shipment from another source to the requisitioning organization.

46. Army Supply and Maintenance Point

a. Available Facilities.

- (1) Each S-M point has the following mobile maintenance teams: radio; carrier and switching; teletypewriter and cryptographic; electronic; facsimile, meteorological, and photographic radar; and power equipment.
- (2) Each team is provided with a Signal Corps repair shop mounted on a 2½-ton truck, a trailer-mounted gasoline engine generator, a ¾-ton cargo truck, and a ¾-ton cargo trailer, except the power equipment maintenance team which has a 2½-ton truck and a 1½-ton trailer in lieu of the ¾-ton truck and ¾-ton trailer. The repair shop provides heated and illuminated work space completely set up and ready for use upon arrival of the truck and its personnel at any location where the services of the repair team are required.
- (3) Each team carries a small working stock of repair parts and maintenance float (direct exchange) items. The maintenance float items and repair parts are obtained from the supply platoon of the signal forward supply and maintenance company which operates the S-M point.

b. Method of Operation.

- (1) The mobile teams are dispatched to support division, corps, and army units based upon the following considerations:
 - (a) Tactical situation of the field army.
 - (b) The need for maintenance support at division, corps, and army units.
 - (c) Number of teams at the S-M point available to be dispatched.
- (2) When supporting a given unit, maintenance must be effected as rapidly and efficiently as possible. Teams make on-the-spot determination of whether unserviceable equipment should be repaired immediately, exchanged for serviceable equipment, or evacuated to the army S-M point. At this level, it is intended to repair equipment to the point of rendering it combat serviceable according to SB 11-100 (combat serviceability) standards.
- (3) Some of the larger items of Signal Corps equipment, such as radar, telephone centrals, etc., cannot be readily evacuated or removed from its site; this necessitates on-the-spot repair. Repair may often be accomplished by dis-

patching personnel and necessary equipment to accomplish on site repair.

- (4) Repair teams that are not employed in support of a unit are grouped in or near the S-M point to operate as the signal maintenance element at that point. These teams repair equipment evacuated to them from the dispatched repair teams, or evacuate the equipment to the army depot.
- (5) Since the primary effort of the mobile maintenance teams is to render direct maintenance support, the teams will maintain only the minimum records necessary to control their operations.

47. Army Depot

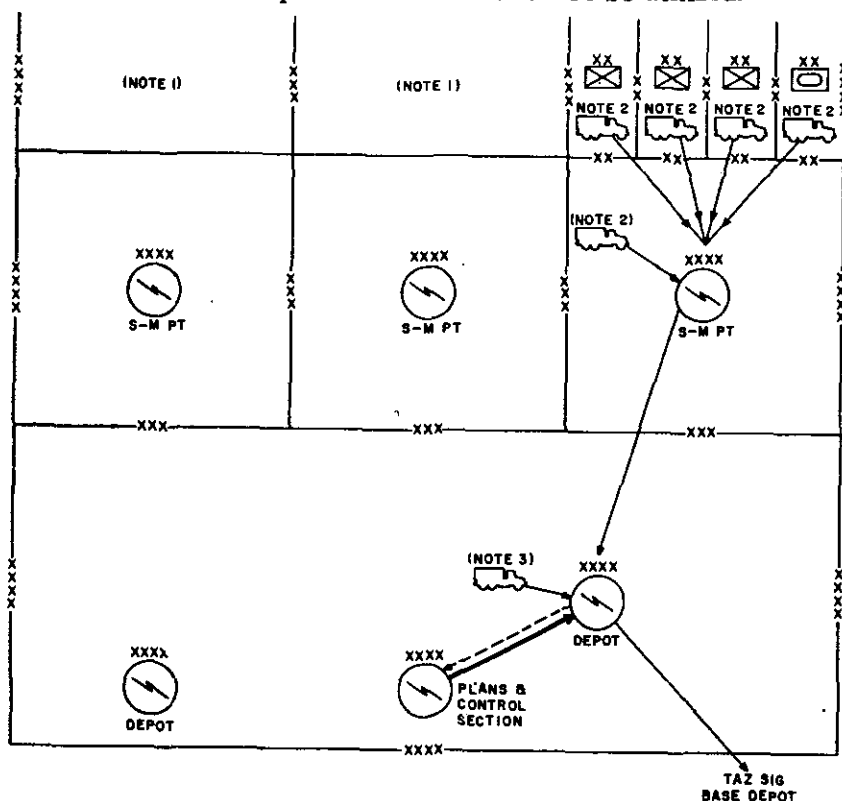
a. Available Facilities.

- (1) Each of the two repair platoons of the signal depot companies has the following equipment repair sections: radar, radio, wire, electronic, power unit, photographic, and a supporting shop and tools section. In addition, each of the depot companies has a cryptographic equipment section that furnishes cryptographic maintenance support for the field army.
- (2) The repair sections are authorized a larger assortment of repair parts and more precise tools and test equipment than the mobile teams of the signal forward supply and maintenance companies. They are capable of operating as a semifixed shop to support the maintenance operations of the S-M points. In addition, each of the depot repair platoons is equipped with truck-mounted Signal Corps repair shops with trailer-mounted gasoline engine generators and $\frac{3}{4}$ -ton cargo trucks and trailers.
- (3) Each shop and tools section supports the depot repair platoon. Each is capable of furnishing the equipment repair sections with the necessary tooling, carpentry, welding, painting, and woodworking in support of maintenance operations.

b. Method of Operation (fig. 15).

- (1) Equipment returned to the depot as excess, or evacuated for further repair, must be screened by the storage and issue section of the depot. This equipment is then classified as:
 - (a) Salvage.
 - (b) Serviceable.
 - (c) Economically repairable.

- (2) If equipment is to be repaired and returned, it will be screened by maintenance personnel for final classification. Three courses of action are then available to the depot:
 - (a) Immediate replacement of equipment from the maintenance float. This immediately returns serviceable equipment to the units and permits repair of the unserviceable equipment when time permits.
 - (b) Repair of equipment and return to user. This is done when the time and the tactical situation permits.
 - (c) Evacuation to TAZ.
- (3) When repair of unserviceable stocks is directed, it will be conducted on as large a scale as possible. This usually means that production-line runs will be utilized.



- NOTES:**
1. SAME AS THE CORPS ON RIGHT.
 2. MOBILE REPAIR TEAMS OF SIG FWD SUP & MAINT CO.
 3. DEPOT REPAIR PLATOON MOBILE REPAIR TEAM.

- LEGEND:**
- EVACUATION OF UNSERVICEABLE EQUIPMENT.
 - - - - - REPORTS OF MAINTENANCE SHOP PRODUCTION.
 - REPAIR SCHEDULES.

S-M PT SUPPLY AND MAINTENANCE POINT.

FM14-15

Figure 15. Flow of unserviceable equipment in a field army.

- (4) The cryptographic equipment section receives, stores, issues, and accounts for registered and nonregistered cryptographic material and equipment within the field army. In addition, this section performs third and limited fourth echelon maintenance of cryptographic equipment. This may be done at the depot or on site. For maximum security, the section is normally located near a company headquarters and operates as a separate repair organization.

Section III. SUPPLY AND MAINTENANCE FUNCTIONS OF HEADQUARTERS AND HEADQUARTERS DETACHMENT

48. Central Stock Control Center

a. The army stock control center is operated by the central stock control section of headquarters and headquarters detachment. This section receives requisitions for items which cannot be filled by army depots or S-M points and demand data generated by using organizations. The section also maintains and up dates stock records to reflect the on-hand balance of all equipment, repair parts, and quantities of stock due in and due out. This information is made available in consolidated form to the plans and control section of headquarters and headquarters detachment.

b. For supply and maintenance support to be effective, the required support must be rendered in close proximity to the supported units. The plans and control section directs the location of sites for the army depots and S-M points based on the following:

- (1) Tactical considerations.
- (2) Location of supported units.
- (3) Availability of transportation facilities.
- (4) Location of supporting supply activities.
- (5) Security and concealment.

49. Plans and Control Section

a. The plans and control section reviews and analyzes reports from the central stock control section relative to:

- (1) Items in short supply.
- (2) Serviceable major items and components on hand.
- (3) Unserviceable major items and components on hand.
- (4) Availability of repair parts.

b. The plans and control section reviews and analyzes reports from the depots relative to:

- (1) Maintenance shop production.
- (2) Total maintenance capability.
- (3) Equipment on hand awaiting repair.

c. Based upon the aforementioned information, the plans and control section prepares repair schedules from which priorities are established. The schedules are then forwarded to the depot repair platoons for repair and return to stock of serviceable items. If there is a shortage of major equipments and sufficient components are on hand, the depots may be ordered to assemble the components and return them to stock.

d. The plans and control section reviews and analyzes demand data received from field army units. Based upon the fluctuations of demand data, revisions are made to the S-M point stockage lists and to items authorized for stockage at army depots.

e. Requisitions received by the central stock control section are analyzed to ascertain that no abuses are evident in the requisition process, particularly for emergency and blue streak requisitions. When necessary, corrective action is initiated.

f. In an effort to improve combat support, the plans and control section analyzes the overall army supply and maintenance situation and prepares appropriate standing operating procedures.

APPENDIX

REFERENCES

AR 220-60	Battalions : General Provisions.
AR 220-70	Companies : General Provisions.
AR 320-5	Dictionary of United States Army Terms.
AR 320-50	Authorized Abbreviations and Brevity Code.
AR 380-5	Military Security, Safeguarding Defense Information.
FM 21-5	Military Training.
FM 21-6	Techniques of Military Instruction.
FM 21-30	Military Symbols.
SB 11-100-series	Serviceability Standards for Signal Equipment.
DA Pam 108-1	Index of Army Motion Pictures, Filmstrips, Slides, and Phono-Recordings.
DA Pam 310-1	Military Publications: Index of Administrative Publications.
DA Pam 310-2	Military Publications, Index of Blank Forms.
DA Pam 310-3	Military Publications, Index of Training Publications.
DA Pam 310-4	Military Publications, Index of Technical Manuals, Technical Bulletins, Supply Bulletins, Lubrication Orders, and Modification Work Orders.
DA Pam 310-5	Military Publications, Index of Graphic Training Aids and Devices.
DA Pam 310-7	Military Publications, Index of Tables of Organization and Equipment, Tables of Organization, Type Tables of Distribution, and Tables of Allowances.
DA Pam 310-21	Military Publications, Index of Supply Manuals, Signal Corps.

[AG 353 (24 Jun 59)]

By Order of *Wilber M. Brucker*, Secretary of the Army:

L. L. LEMNITZER,
General, United States Army,
Chief of Staff.

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R. V. LEE,
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NG: State AG (3); units—same as Active Army except allowance is one copy to each unit.

USAR: Div (2).

For explanation of abbreviations used, see AR 320-50.

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